Minneapolis Bicycle and Walking Commute Data

Updated January 2012

Minneapolis Bicycling and Walking Indicators

The City of Minneapolis aims to increase the number of trips made by bicycle or walking among city residents. This goal has the potential to yield many benefits including lower greenhouse gas emissions, decreased traffic congestion, less maintenance costs for roadways and most importantly, a healthier population.

To determine if Minneapolis is increasing trips made by the two modes, the City uses two primary indicators: non-motorized traffic counts and commuting data. Since 2007, Minneapolis Public Works has collected data on the number of bicyclists and pedestrian trips at consistent locations throughout the city. In addition, the City uses journey to work data collected by the U.S. Census Bureau as part of the American Community Survey (ACS).

This report highlights the most recent commute data for Minneapolis and provides background on how the data is collected by the Census Bureau, with a focus on ACS data.

Decennial Census and American Community Survey

The U.S. Census Bureau began collecting journey to work data with the 1960 decennial census. Commute mode choice and commute travel times were collected through the 2000 census as part of the decennial long form questionnaire, received by one out of seven households. Beginning in the late 1990s, the Census Bureau began piloting the American Community Survey, a replacement for the long-form questionnaire. From 1997 to 2004, the ACS was piloted in large communities and became operational in 2005, although data for group quarters was not collected until 2006. Commuting data is no longer collected as part of the decennial census.

The ACS strives to gather more frequent and more detailed data, providing coverage in years between the decennial census. While released more frequently, the ACS data is based on a sample and does not necessarily reflect actual population counts and community attributes. The ACS samples about 250,000 households nationally every month or about three million households each year.

The ACS collects data on an ongoing basis and releases three types of data estimates: One-year, three-year, and five-year estimates. One-year estimates are released to provide the most current data available. However, because the data is based on just one year, the sample size is relatively small and the margin of error is large. However, sampling over a period of several years increases the sample size and lowers the margin of error. This is the logic behind the three and five-year estimates. One disadvantage to the three and five-year estimates is that the data released is not as current as the one-year estimates.

In Minneapolis, the unweighted sample, or number of individuals sampled is about 5,000 annually. So, a one-year estimate for Minneapolis is based on a sample size of about 5,000. Three-year estimates cover a period of three years, so the sample size is approximately 15,000. Five-year estimates for Minneapolis are based on a sample size of about 25,000.

Data is released the during the fall of the following year. For example, one-year estimates for 2011 are released in the fall of 2012 and five-year estimates for 2007-2012 are released in the fall of 2013.

ACS Estimate Types

Estimate	Sample Size	Accuracy and Use	Release Date
1-year Estimate	5,000	Largest margin of error, but most current	September of following year
3-year Estimate	15,000	Moderate margin of error, somewhat current	October of following year
5-year Estimate	25,000	Smallest margin of error, but least current	December of following year

Journey to Work Data

The American Community Survey includes 48 questions on sex, age, income, race, ethnicity, household size and other personal and household attributes. Five questions directly pertain to a person's place of work, means of transportation to work, and travel time to work. These questions are directed at workers of age 16 and older who are residents of a given geography – in this case the City of Minneapolis. The survey is administered year-round and uses the previous week as a reference week for this set of questions. The means of transportation to work question asks how the individual *usually* travelled to work in the previous week. If the person usually used more than one mode (i.e., walked two blocks and then took a bus) only the mode used for the greatest distance would be checked.

Because the survey is administered nationally, the survey includes many transportation modes not present in Minneapolis, such as "subway" and "ferryboat." Despite the lack of these modes in Minneapolis, subway and ferryboat are often checked due to inaccurate responses by participants and variation due to margin of error. Note that the "streetcar or trolley car" includes light rail transit.

The journey to work question in the 2010 questionnaire was the following:

Question 31
How did this person usually get to work LAST WEEK? If this person usually used more than one method of transportation during the trip, mark (X) the box of the one used for most of the distance.
• Car, truck, or van • Bus or trolley bus • Streetcar or trolley car • Subway or elevated • Railroad • Ferryboat • Taxicab • Motorcycle • Bicycle • Walked • Worked at home - SKIP to question 39a • Other method

To determine carpool status in a car, truck or van, an additional question addresses the number people who rode in the vehicle. The relevant section of the questionnaire and related instruction page are provided in the Appendix. Full questionnaires and documentation are provided on the Census Bureau's website site.

To simplify analysis of Minneapolis conditions, some modes are aggregated for this report:

Aggregated Names	ACS Nomenclature
Car	Car, truck, or van (1 occupant)
Carpool	Car, truck, or van (2 or more occupants)
Transit	Bus or trolley bus
	Streetcar or trolley car
	Subway or elevated
	Railroad
	Ferryboat
Bicycle	Bicycle
Walked	Walked
Worked at home	Worked at Home
Other	Taxicab
	Motorcycle
	Other

Survey Limitations

While the ACS provides the most current, consistent, and robust dataset on commuting for Minneapolis residents, the survey questions have many shortcomings when tracking commuting data, especially trips by walking and bicycling.

Statistical Survey

The ACS is a statistical survey based on a sample of the population. Released data is only an estimate of the population and related attributes and may not reflect the actual attributes of selected geographies and individuals. The Census Bureau releases margins of error with all estimates and thoroughly documents its methodology from every step of survey administration to all statistically computations. Margins of error for all data can be found in the Appendix and full methodology documentation can be found on the Census Bureau's website.

Commuting Trips

The ACS only asks about commuting trips and does not account for recreational trips, trips to school, trips for errands or other purposes. Data collected in 2000 by the Twin Cities Metropolitan Council shows that only 12.8 percent of trips in the Seven County Metropolitan Area involved a person traveling from home to work or from work to home, indicating that commuting represents a small portion of overall travel behavior.

Year-Round Sampling

The ACS is administered year-round, sampling about 5,000 Minneapolis residents or approximately 420 individuals per month. Because walking, and especially bicycling, are more prevalent in warmer months, these modes may be underrepresented compared to geographies in mild and warm climates. Year-round sampling may also yield inconsistent results from year to year and may to be impacted by abnormally harsh or mild winters.

Primary Commuting Mode

The ACS question asks for an individual's *usual* and *primary* mode of transportation. If an individual walks or bicycles to work one or two days a week, those trips are not counted. Also, if an individual walks or bicycles a short distance to a transit station, that trip is not counted in cases when the transit portion of the trip is longer than the walking or bicycling portion of the trip. For this reason, bicycling and especially walking are significantly underrepresented because those two modes are integral parts of most transit trips.

Other Data Sources

In addition to the regular ACS estimates, other data sources on commuting and travel behavior are available for Minneapolis including the ACS Public Use Microdata Sample and the Metropolitan Council's Travel Behavior Inventory.

ACS Public Use Microdata Sample

ACS data is also released as part of the Public Use Microdata Sample (PUMS), allowing the public to view full responses for a subsample of questionnaires. To protect the confidentiality of respondents, personal identification is suppressed and some data is randomly switched with neighboring geographies. While the data set provides a high level of detail, the data should not be analyzed without a full knowledge of the statistical

implications. PUMS data is currently available for all ACS estimate types for geographies with a population of 65,000 or more.

Metropolitan Council Travel Behavior Inventory

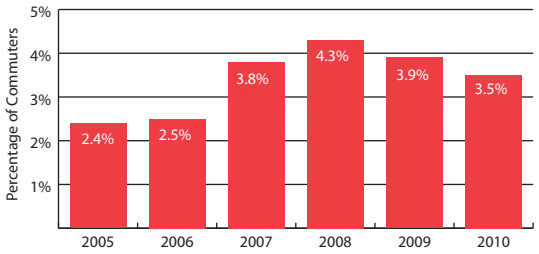
The Twin Cities Metropolitan Council collects detailed trip data every 10 years through its Travel Behavior Inventory (TBI). The most recent TBI data, collected in 2000, indicates that 4.5 percent of all trips made by Minneapolis residents are by bicycle and 13.6 percent are by walking. Compared to the Seven-County Metropolitan Area, bicycling and walking account for 1.5 and 5.6 percent of trips, respectively. The 2010-2011 survey sampled 13,000 households throughout a 19 county sample area. Data is expected to be released later in 2012.

Highlights of the Data through 2010

Bicycle Commuting of Minneapolis Residents

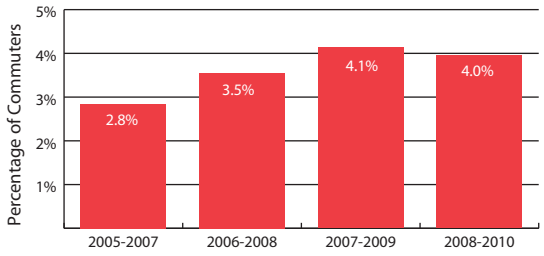
The 2010 one-year estimate for bicycle commuters was 6,969 of an estimated 200,853 workers, or 3.5 percent of the commute mode share. This is down from 3.8 percent in 2009 and 4.3 percent in 2008.

Bicycle Commute Mode Share
ACS 1-Year Estimates



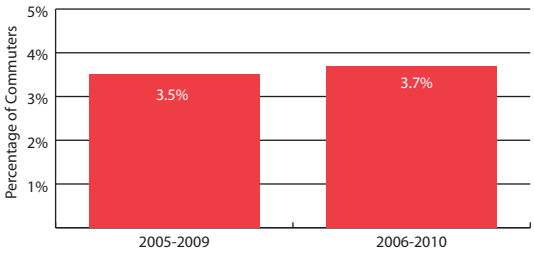
The 2008-2010 three-year estimate for bicycle commuters was 8,029 of an estimated 203,239 workers or 4.0 percent. This is down from the 2007-2009 three-year estimate of 4.1 percent, but up from the 2006-2008 three-year estimate of 3.5 percent.

Bicycle Commute Mode Share
ACS 3-Year Estimates



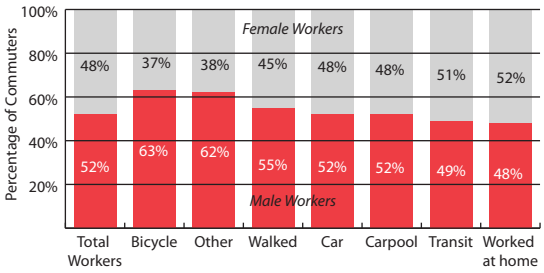
The 2006-2010 five-year estimate for bicycle commuters was 7,472 of an estimated 202,169 workers, or 3.7 percent of the commute mode share. This is up from the 2005-2009 five-year estimate of 3.5 percent.

Bicycle Commute Mode Share
ACS 5-Year Estimates



The 2006-2010 five-estimate indicates that 37 percent of Minneapolis bicycle commuters in the five-year estimate are women. This is compared to 26 percent nationally.

Commute Mode Share by Sex
2006-2010 ACS 5-Year Estimate



Based on the 2010 one-year estimate, Minneapolis ranks fourth among the nation's 70 largest cities and 23rd among the 375 communities sampled by the ACS. The current U.S. bicycle mode share is 0.53 percent.

Bicycle Commuters - Peer City Rankings

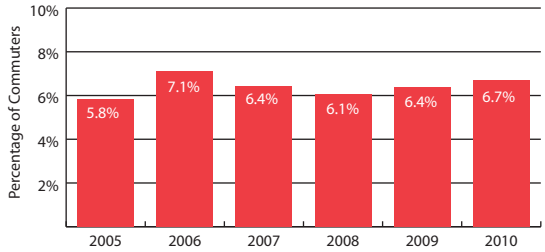
70 Largest U.S. Cities			375 ACS Communities		
Rank	City	%	Rank	City	%
1	Portland, OR	6.0%	1	Davis, CA	22.1%
2	Seattle, WA	3.6%	2	Boulder, CO	9.9%
3	San Francisco, CA	3.5%	3	Eugene, OR	8.3%
4	Minneapolis, MN	3.5%	4	Berkeley, CA	8.0%
5	Washington, DC	3.1%	5	Cambridge, MA	6.8%
6	Tucson, AZ	3.0%	6	Santa Barbara, CA	6.4%
7	Sacramento, CA	2.5%	7	Madison, WI	6.0%
8	Denver, CO	2.2%	8	Gainesville, FL	6.0%
9	Tampa, FL	1.9%	9	Portland, OR	6.0%
10	Philadelphia, PA	1.8%	10	Iowa City, IA	5.6%
-	U.S. Average	0.53%	23	Minneapolis	3.5%

Bicycle commuter mode share data for other Minnesota cities includes Duluth at 1.6 percent, Rochester at 1.1 percent, Saint Cloud at 1.1 percent, Saint Paul at 0.9 percent, and Bloomington at 0.7 percent.

Walking Commuting of Minneapolis Residents

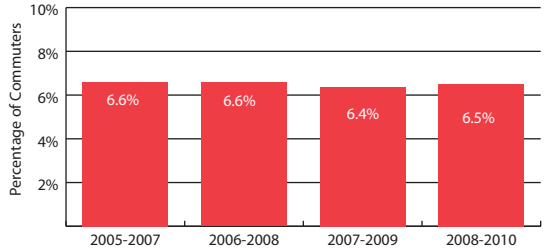
The 2010 one-year estimate for walking commuters was 13,458 of an estimated 200,853 workers, or 6.7 percent of the commute mode share. This is up from 6.4 percent in 2009 and 6.1 percent in 2008.

Walking Commute Mode Share
ACS 1-Year Estimates



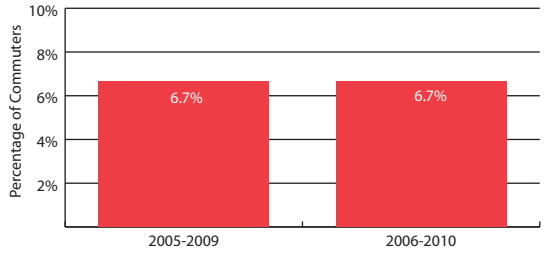
The 2008-2010 three-year estimate for walking commuters was 13,207 of an estimated 203,239 workers or 6.5 percent. This is up from the 2007-2009 three-year estimate of 6.4 percent, but down from the 2006-2008 three-year estimate of 6.6 percent.

Walking Commute Mode Share
ACS 3-Year Estimates



The 2006-2010 five-year estimate for walking commuters was 13,476 of an estimated 202,169 workers, or 6.7 percent of the commute mode share. This held steady from the 2005-2009 five-year estimate of 6.7 percent.

Walking Commute Mode Share
ACS 5-Year Estimates



Minneapolis currently ranks 10th among the nation's 70 largest cities and 17th among the 375 communities sampled by the ACS. The current U.S. walking mode share is 2.8 percent.

Walking Commuters - Peer City Rankings

70 Largest U.S. Cities			375 ACS Communities		
Rank	City	%	Rank	City	%
1	Boston, MA	15.8%	1	Cambridge, MA	24.0%
2	Washington, DC	11.8%	2	Miami Beach, FL	18.7%
3	Pittsburgh, PA	10.8%	3	Evanston, IL	16.8%
4	New York, NY	10.1%	4	Provo, UT	16.4%
5	San Francisco, CA	9.4%	5	Boston, MA	15.8%
6	Honolulu , HA	9.2%	6	Ann Arbor, MI	15.5%
7	Seattle, WA	8.6%	7	Iowa City, IA	14.4%
8	Philadelphia, PA	8.3%	8	Bloomington, IN	14.3%
9	Newark, NJ	7.3%	9	Berkeley, CA	13.7%
10	Minneapolis, MN	6.7%	10	Champaign, IL	12.2%
-	U.S. Average	2.80%	17	Minneapolis, MN	6.70%

Walking commuter mode share data for other Minnesota cities includes Saint Paul at 5.0 percent, Duluth at 4.9 percent, Saint Cloud at 3.7 percent, Rochester at 2.8 percent and Bloomington at 1.5 percent.

Geographic Distribution of Bicycle and Walking Commuters

Some ACS data is available at smaller geographies, including the census tract level. Mapping journey to work data for Minneapolis reveals a clear correlation between commute mode choice, land use type and resident's distance from downtown Minneapolis or the University of Minnesota (U of M) campus. The most concentrated areas for bicycling, walking and transit commuting tend to be proximate to downtown or the U of M campus. Minneapolis residents who primarily commute by car tend to be concentrated in census tracts farther away from these activity centers. Mapped data for all modes is provided in the Appendix.

Additional Resources

Minneapolis Sustainability Indicators
www.minneapolismn.gov/sustainability/indicators/index.htm

U.S. Census Bureau
www.census.gov

American Community Survey
www.census.gov/acs/www

Public Use Microdata Sample
www.census.gov/acs/www/data_documentation/pums_data/

Metropolitan Council Travel Behavior Inventory
www.metrocouncil.org/planning/transportation/TBI

League of American Bicyclists
www.bikeleague.org/news/acs2010.php

Appendix

2010 ACS Questionnaire and Guide

Excerpt Page from 2010 American Community Survey Questionnaire
Excerpt Page from 2010 American Community Survey Questionnaire Guide

Complete 1990-2010 Data

Complete 1990-2010 Data Table

2006-2010 ACS 5-Year Estimate Maps

Percentage of Bicycle Commuters by Census Tract
Percentage of Walking Commuters by Census Tract
Percentage of Transit Commuters by Census Tract
Percentage of Car Commuters by Census Tract
Percentage of Carpool Commuters by Census Tract
Percentage of Workers who Work at Home by Census Tract
Percentage of Other Commuters by Census Tract

Excerpt Page from 2010 American Community Survey Questionnaire

Journey to Work Question Highlighted Below

13191101

Person 1 (continued)

29 **a. LAST WEEK, did this person work for pay at a job (or business)?**

- ☐ Yes ➔ *SKIP to question 30*
- ☐ No – Did not work (or retired)

b. LAST WEEK, did this person do ANY work for pay, even for as little as one hour?

- ☐ Yes
- ☐ No ➔ *SKIP to question 35a*

30 **At what location did this person work LAST WEEK?** *If this person worked at more than one location, print where he or she worked most last week.*

a. Address (Number and street name)

If the exact address is not known, give a description of the location such as the building name or the nearest street or intersection.

b. Name of city, town, or post office

c. Is the work location inside the limits of that city or town?

- ☐ Yes
- ☐ No, outside the city/town limits

d. Name of county

e. Name of U.S. state or foreign country

f. ZIP Code

31 **How did this person usually get to work LAST WEEK?** *If this person usually used more than one method of transportation during the trip, mark (X) the box of the one used for most of the distance.*

- ☐ Car, truck, or van
- ☐ Bus or trolley bus
- ☐ Streetcar or trolley car
- ☐ Subway or elevated
- ☐ Railroad
- ☐ Ferryboat
- ☐ Taxicab
- ☐ Motorcycle
- ☐ Bicycle
- ☐ Walked
- ☐ Worked at home ➔ *SKIP to question 39a*
- ☐ Other method

J *Answer question 32 if you marked "Car, truck, or van" in question 31. Otherwise, SKIP to question 33.*

32 **How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?**

Person(s)

33 **What time did this person usually leave home to go to work LAST WEEK?**

Hour : Minute

- ☐ a.m.
- ☐ p.m.

34 **How many minutes did it usually take this person to get from home to work LAST WEEK?**

Minutes

K *Answer questions 35 – 38 if this person did NOT work last week. Otherwise, SKIP to question 39a.*

35 **a. LAST WEEK, was this person on layoff from a job?**

- ☐ Yes ➔ *SKIP to question 35c*
- ☐ No

b. LAST WEEK, was this person TEMPORARILY absent from a job or business?

- ☐ Yes, on vacation, temporary illness, maternity leave, other family/personal reasons, bad weather, etc. ➔ *SKIP to question 38*
- ☐ No ➔ *SKIP to question 36*

c. Has this person been informed that he or she will be recalled to work within the next 6 months OR been given a date to return to work?

- ☐ Yes ➔ *SKIP to question 37*
- ☐ No

36 **During the LAST 4 WEEKS, has this person been ACTIVELY looking for work?**

- ☐ Yes
- ☐ No ➔ *SKIP to question 38*

37 **LAST WEEK, could this person have started a job if offered one, or returned to work if recalled?**

- ☐ Yes, could have gone to work
- ☐ No, because of own temporary illness
- ☐ No, because of all other reasons (in school, etc.)

38 **When did this person last work, even for a few days?**

- ☐ Within the past 12 months
- ☐ 1 to 5 years ago ➔ *SKIP to* **L**
- ☐ Over 5 years ago or never worked ➔ *SKIP to question 47*

39 **a. During the PAST 12 MONTHS (52 weeks), did this person work 50 or more weeks? Count paid time off as work.**

- ☐ Yes ➔ *SKIP to question 40*
- ☐ No

b. How many weeks DID this person work, even for a few hours, including paid vacation, paid sick leave, and military service?

- ☐ 50 to 52 weeks
- ☐ 48 to 49 weeks
- ☐ 40 to 47 weeks
- ☐ 27 to 39 weeks
- ☐ 14 to 26 weeks
- ☐ 13 weeks or less

40 **During the PAST 12 MONTHS, in the WEEKS WORKED, how many hours did this person usually work each WEEK?**

Usual hours worked each WEEK

10

Excerpt Page from 2010 American Community Survey Questionnaire Guide

Journey to Work Instructions Highlighted Below

If the person worked in a foreign country or Puerto Rico, Guam, etc., print the name of the country on the state or foreign country line.

31. Mark only one box to indicate the method of transportation used to travel the *longest distance* to work last week.

- Mark the "**Car, truck, or van**" box if the person drove a station wagon, company car, light truck of 1-ton capacity or less, truck cab, mini bus, or private limousine (NOT for hire).
- Mark the "**Streetcar or trolley car**" box if the person took light rail or other vehicle that operates on tracks or rails with overhead electrical wires.
- Mark the "**Subway**" box if the person took a subway, or other vehicle that operates on tracks or rails with complete separation from other vehicle and pedestrian traffic.
- Mark the "**Railroad**" box if the person took Amtrak, or any other commuter train with occasional railroad crossings for vehicle and pedestrian traffic.
- Mark the "**Taxicab**" box if the person took a limousine such as an airport limousine for which a fare is charged.
- Mark the "**Motorcycle**" box if the person rode a motorbike, moped, motor scooter, or similar vehicle that is motor driven.
- Mark the "**Bicycle**" box if the person rode a bicycle or other vehicle that is pedaled.
- Mark the "**Walked**" box ONLY if the person walked all the way to work and used no other means of transportation.
- Mark the "**Worked at home**" box if the person worked on a farm where he/she lives, or an office or shop in the person's own home.
- Mark the "**Other method**" box if the person took an airplane, helicopter, horse, horse and buggy, boat (other than public ferries), large motor home, dog sled, large truck or truck rig, All-Terrain Vehicle (ATV), snow machine/snowmobile, Segway® or other self-balancing electric vehicle, skateboard, inline skates, or motorized chair.

ANSWER PERSON QUESTION 32 IF YOU MARKED "CAR, TRUCK, OR VAN" IN QUESTION 31.

32. *If the person was driven to work by someone who then drove back home or to a non-work destination*, enter "1" in the box labeled **Person(s)**.

DO NOT include persons who rode to school or some other non-work destination in the count of persons who rode in the vehicle.

33. Give the time of day the person usually *left home to go to work.* **DO NOT** give the time that the person usually began his or her work.

Complete Journey to Work Data

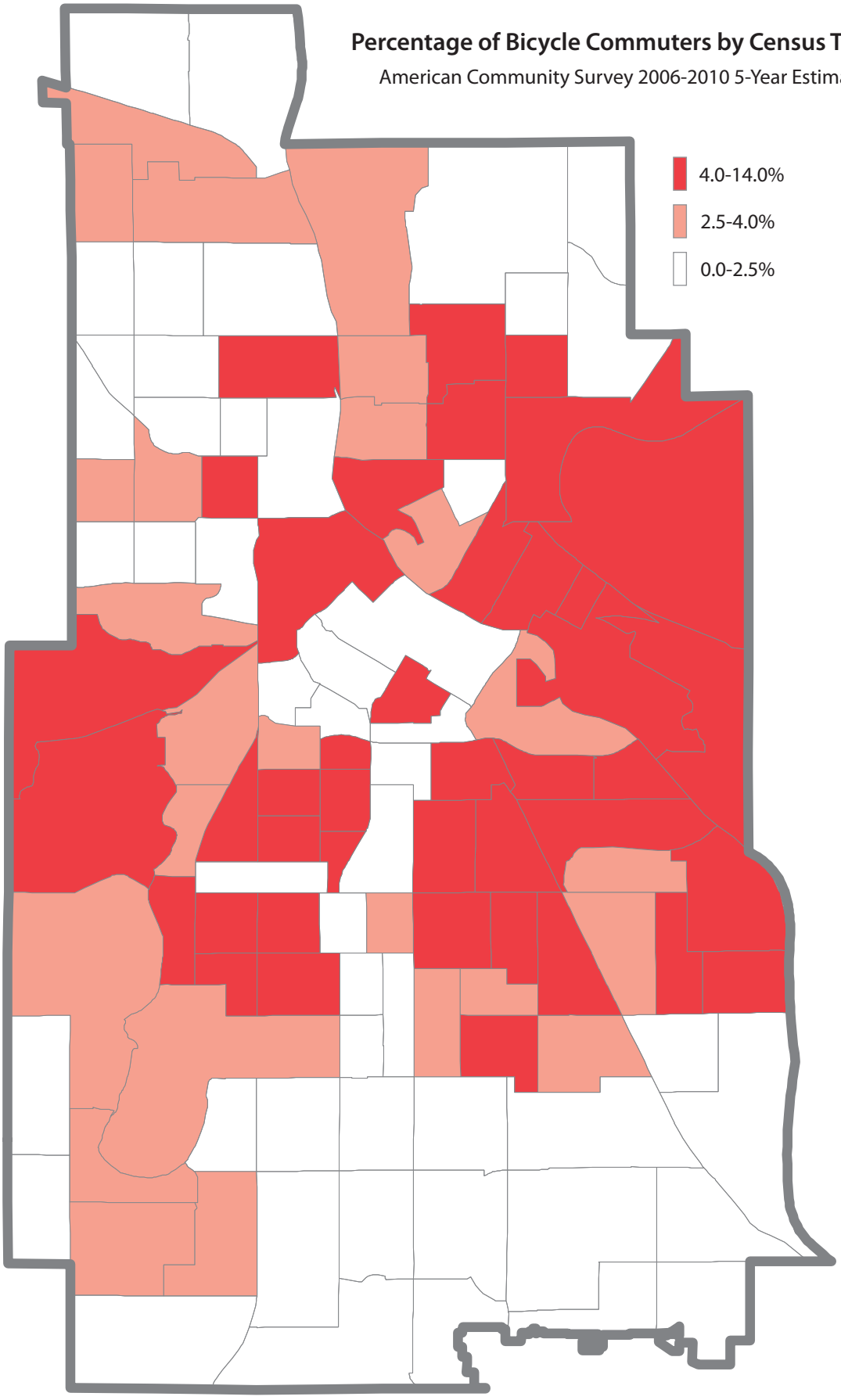
Decennial Census 1990-2000, ACS Data 2005-2010

Mode	Measurement	Decennial Census		ACS 1-year Estimates						ACS 3-year Estimates				ACS 5-year Estimates	
		1990	2000	2005	2006	2007	2008	2009	2010	2005-2007	2006-2008	2007-2009	2008-2010	2005-2009	2006-2010
Bicycle	Estimate	3,014	3,856	4,589	4,835	7,198	8,164	8,036	6,969	5,424	6,770	8,585	8,029	7,171	7,472
	%	1.6%	1.9%	2.4%	2.5%	3.8%	4.3%	3.9%	3.5%	2.8%	3.5%	4.1%	4.0%	3.5%	3.7%
	Margin of Error	-	-	868	948	1,463	1,449	1,445	1,322	565	795	870	869	531	632
	Margin of Error %	-	-	0.5%	0.5%	0.8%	0.8%	0.7%	0.7%	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%
	Low Estimate	-	-	3,721	3,887	5,735	6,715	6,591	5,647	4,859	5,975	7,715	7,160	6,640	6,840
	High Estimate	-	-	5,457	5,783	8,661	9,613	9,481	8,291	5,989	7,565	9,455	8,898	7,702	8,104
	Low %	-	-	2.0%	2.0%	3.0%	3.5%	3.2%	2.8%	2.5%	3.1%	3.7%	3.5%	3.3%	3.4%
	High %	-	-	2.9%	3.0%	4.6%	5.0%	4.6%	4.1%	3.1%	4.0%	4.6%	4.4%	3.8%	4.0%
Walked	Estimate	14,798	13,488	11,004	13,735	12,169	11,592	13,308	13,458	12,597	12,542	13,236	13,207	13,618	13,476
	%	7.8%	6.6%	5.8%	7.1%	6.4%	6.1%	6.4%	6.7%	6.6%	6.6%	6.4%	6.5%	6.7%	6.7%
	Margin of Error	-	-	2,168	1,897	1,417	1,578	2,404	1,961	1,031	1,092	1,193	1,121	925	972
	Margin of Error %	-	-	1.1%	1.0%	0.7%	0.8%	1.2%	1.0%	0.5%	0.6%	0.6%	0.6%	0.5%	0.5%
	Low Estimate	-	-	8,836	11,838	10,752	10,014	10,904	11,497	11,566	11,450	12,043	12,086	12,693	12,504
	High Estimate	-	-	13,172	15,632	13,586	13,170	15,712	15,419	13,628	13,634	14,429	14,328	14,543	14,448
	Low %	-	-	4.7%	6.1%	5.7%	5.2%	5.2%	5.7%	6.1%	6.0%	5.8%	5.9%	6.2%	6.2%
	High %	-	-	7.0%	8.1%	7.2%	6.9%	7.6%	7.7%	7.1%	7.1%	7.0%	7.0%	7.1%	7.1%
Transit	Estimate	29,779	29,681	23,597	25,533	25,333	27,517	27,260	30,488	24,929	25,741	28,640	29,318	27,471	28,137
	%	15.8%	14.6%	12.5%	13.2%	13.4%	14.4%	13.1%	15.2%	13.1%	13.5%	13.8%	14.4%	13.5%	13.9%
	Margin of Error	-	-	3,072	2,647	2,711	2,605	3,263	3,187	1,558	1,510	1,585	1,628	1,247	1,156
	Margin of Error %	-	-	1.6%	1.4%	1.4%	1.4%	1.6%	1.6%	0.8%	0.8%	0.8%	0.8%	0.6%	0.6%
	Low Estimate	-	-	20,525	22,886	22,622	24,912	23,997	27,301	23,371	24,231	27,055	27,690	26,224	26,981
	High Estimate	-	-	26,669	28,180	28,044	30,122	30,523	33,675	26,487	27,251	30,225	30,946	28,718	29,293
	Low %	-	-	10.8%	11.8%	11.9%	13.0%	11.5%	13.6%	12.3%	12.7%	13.0%	13.6%	12.9%	13.3%
	High %	-	-	14.1%	14.6%	14.8%	15.8%	14.7%	16.8%	13.9%	14.3%	14.6%	15.2%	14.1%	14.5%
Drove Alone	Estimate	113,703	125,583	118,131	121,196	115,771	119,877	129,381	122,836	117,981	118,580	127,909	125,194	126,132	124,496
	%	60.3%	61.6%	62.4%	62.6%	61.1%	62.7%	62.2%	61.2%	61.8%	62.1%	61.6%	61.6%	61.8%	61.6%
	Margin of Error	-	-	5,944	5,631	4,505	4,945	4,683	5,064	2,626	2,616	2,451	2,662	2,293	2,082
	Margin of Error %	-	-	3.1%	2.9%	2.4%	2.6%	2.3%	2.5%	1.4%	1.4%	1.2%	1.3%	1.1%	1.0%
	Low Estimate	-	-	112,187	115,565	111,266	114,932	124,698	117,772	115,355	115,964	125,458	122,532	123,839	122,414
	High Estimate	-	-	124,075	126,827	120,276	124,822	134,064	127,900	120,607	121,196	130,360	127,856	128,425	126,578
	Low %	-	-	59.3%	59.7%	58.7%	60.1%	59.9%	58.6%	60.5%	60.8%	60.4%	60.3%	60.7%	60.6%
	High %	-	-	65.5%	65.5%	63.4%	65.3%	64.4%	63.7%	63.2%	63.5%	62.8%	62.9%	63.0%	62.6%
Carpooled	Estimate	19,837	23,132	24,277	17,997	18,918	13,309	18,341	14,087	20,152	16,660	17,967	15,716	19,083	17,073
	%	10.5%	11.3%	12.8%	9.3%	10.0%	7.0%	8.8%	7.0%	10.6%	8.7%	8.7%	7.7%	9.4%	8.4%
	Margin of Error	-	-	3,693	1,950	2,437	1,921	2,445	2,149	1,854	1,264	1,496	1,282	1,080	1,111
	Margin of Error %	-	-	2.0%	1.0%	1.3%	1.0%	1.2%	1.1%	1.0%	0.7%	0.7%	0.6%	0.5%	0.5%
	Low Estimate	-	-	20,584	16,047	16,481	11,388	15,896	11,938	18,298	15,396	16,471	14,434	18,003	15,962
	High Estimate	-	-	27,970	19,947	21,355	15,230	20,786	16,236	22,006	17,924	19,463	16,998	20,163	18,184
	Low %	-	-	10.9%	8.3%	8.7%	6.0%	7.6%	5.9%	9.6%	8.1%	7.9%	7.1%	8.8%	7.9%
	High %	-	-	14.8%	10.3%	11.3%	8.0%	10.0%	8.1%	11.5%	9.4%	9.4%	8.4%	9.9%	9.0%
Worked at Home	Estimate	5,754	6,936	5,550	8,623	9,195	9,736	9,405	10,527	8,161	9,323	9,692	9,781	8,811	9,674
	%	3.1%	3.4%	2.9%	4.5%	4.8%	5.1%	4.5%	5.2%	4.3%	4.9%	4.7%	4.8%	4.3%	4.8%
	Margin of Error	-	-	1,036	1,565	1,421	1,654	1,515	1,628	900	1,033	824	840	578	636
	Margin of Error %	-	-	0.5%	0.8%	0.7%	0.9%	0.7%	0.8%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%
	Low Estimate	-	-	4,514	7,058	7,774	8,082	7,890	8,899	7,261	8,290	8,868	8,941	8,233	9,038
	High Estimate	-	-	6,586	10,188	10,616	11,390	10,920	12,155	9,061	10,356	10,516	10,621	9,389	10,310
	Low %	-	-	2.4%	3.6%	4.1%	4.2%	3.8%	4.4%	3.8%	4.3%	4.3%	4.4%	4.0%	4.5%
	High %	-	-	3.5%	5.3%	5.6%	6.0%	5.2%	6.1%	4.7%	5.4%	5.1%	5.2%	4.6%	5.1%

Mode	Measurement	Decennial Census		ACS 1-year Estimates						ACS 3-year Estimates				ACS 5-year Estimates	
		1990	2000	2005	2006	2007	2008	2009	2010	2005-2007	2006-2008	2007-2009	2008-2010	2005-2009	2006-2010
Other	Estimate	1,673	1,597	2,146	1,672	1,028	993	2,345	2,488	1,514	1,198	1,559	1,994	1,701	1,841
	%	0.9%	0.8%	1.1%	0.9%	0.5%	0.5%	1.1%	1.2%	0.8%	0.6%	0.8%	1.0%	0.8%	0.9%
	Margin of Error	-	-	544	694	338	375	690	764	361	244	315	373	143	272
	Margin of Error %	-	-	0.3%	0.4%	0.2%	0.2%	0.3%	0.4%	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%
	Low Estimate	-	-	1,602	978	690	618	1,655	1,724	1,153	954	1,244	1,621	1,558	1,569
	High Estimate	-	-	2,690	2,366	1,366	1,368	3,035	3,252	1,875	1,442	1,874	2,367	1,844	2,113
	Low %	-	-	0.8%	0.5%	0.4%	0.3%	0.8%	0.9%	0.6%	0.5%	0.6%	0.8%	0.8%	0.8%
	High %	-	-	1.4%	1.2%	0.7%	0.7%	1.5%	1.6%	1.0%	0.8%	0.9%	1.2%	0.9%	1.0%
Unweighted Sample		-	-	4,946	5,421	5,052	5,230	5,465	5,112	15,419	15,704	15,776	15,829	26,143	26,302
Population	Estimate	368,383	382,681	350,260	369,051	351,184	360,914	385,384	383,280	362,513	358,896	382,060	381,401	379,499	379,631
	Margin of Error	-	-	11,740	9,889	9,501	10,146	41	46	3,627	4,873	80	111	44	49
	Low Estimate	-	-	338,520	359,162	341,683	350,768	385,343	383,234	358,886	354,023	381,980	381,290	379,455	379,582
	High Estimate	-	-	362,000	378,940	360,685	371,060	385,425	383,326	366,140	363,769	382,140	381,512	379,543	379,680
Total Workers	Estimate	188,558	203,951	189,294	193,591	189,612	191,188	208,076	200,853	190,758	190,814	207,588	203,239	203,987	202,169
	Margin of Error	-	-	6,466	6,508	5,694	6,183	5,268	5,163	2,605	2,960	2,605	2,507	2,017	1,790
	Margin of Error %	-	-	3.4%	3.4%	3.0%	3.2%	2.5%	2.6%	1.4%	1.6%	1.3%	1.2%	1.0%	0.9%
	Low Estimate	-	-	182,828	187,083	183,918	185,005	202,808	195,690	188,153	187,854	204,983	200,732	201,970	200,379
	High Estimate	-	-	195,760	200,099	195,306	197,371	213,344	206,016	193,363	193,774	210,193	205,746	206,004	203,959

Percentage of Bicycle Commuters by Census Tract*

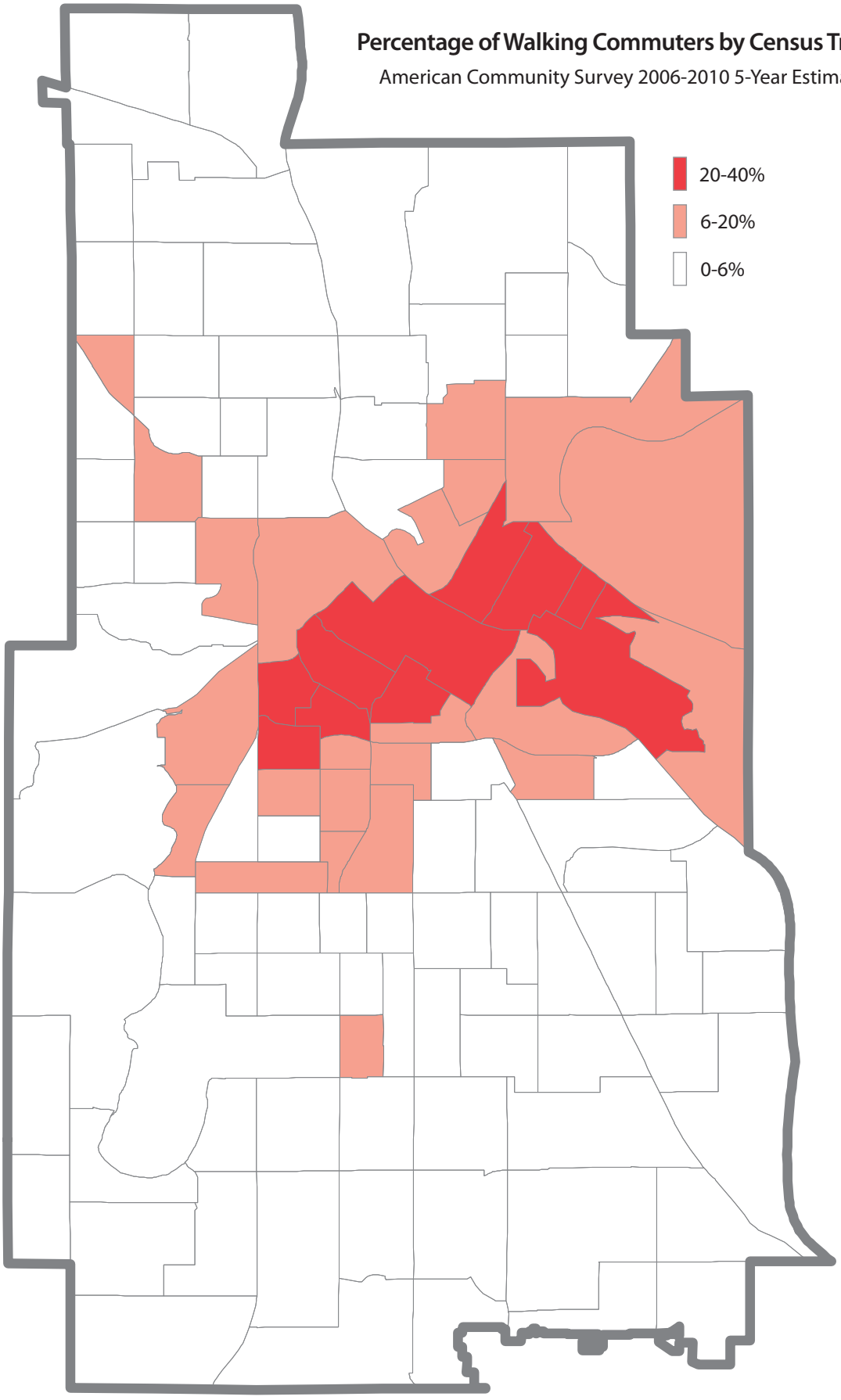
American Community Survey 2006-2010 5-Year Estimate



*Estimated bicycle commuters in census tract divided by estimated workers living in census tract.

Percentage of Walking Commuters by Census Tract*

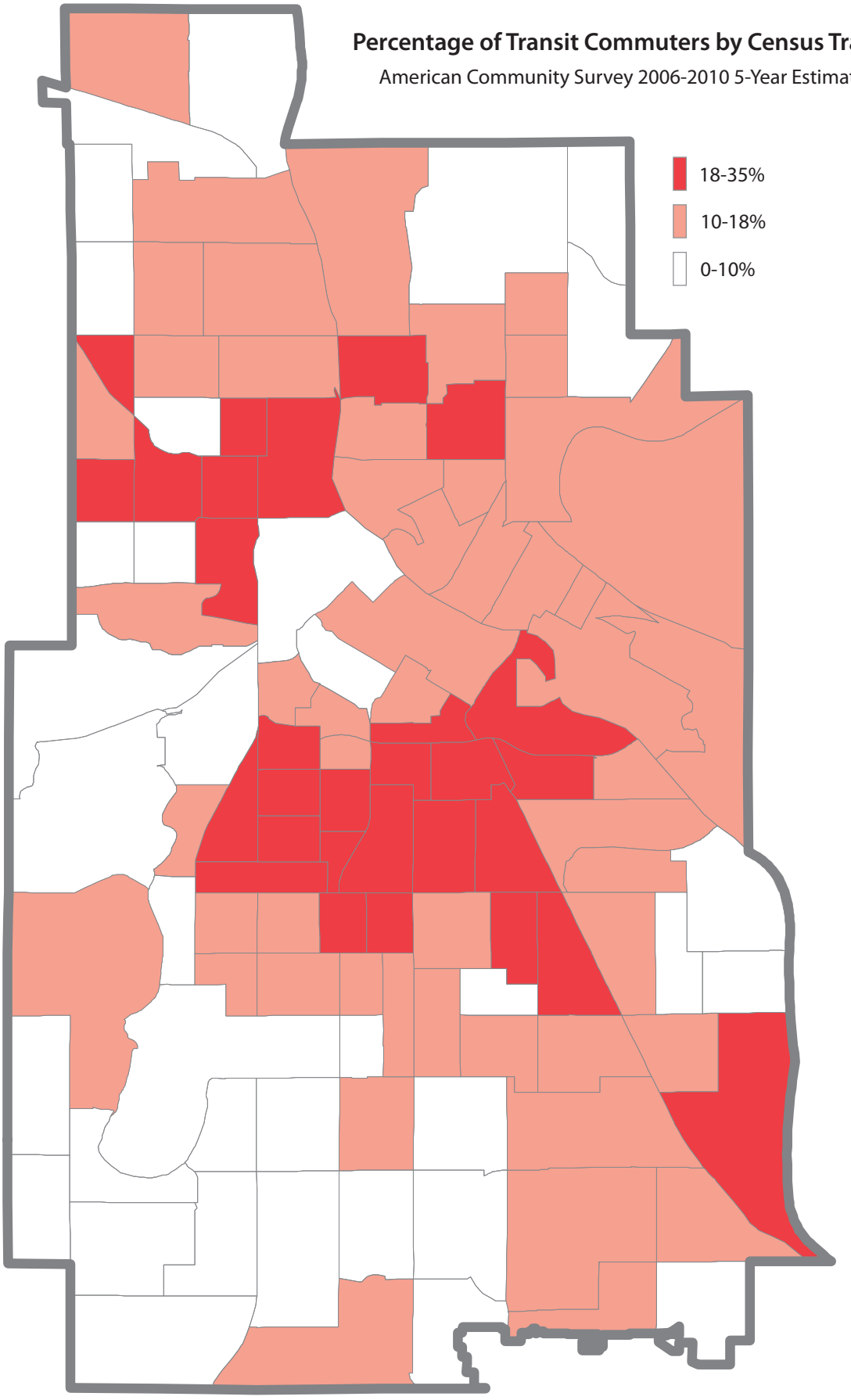
American Community Survey 2006-2010 5-Year Estimate



*Estimated walking commuters in census tract divided by estimated workers living in census tract.

Percentage of Transit Commuters by Census Tract*

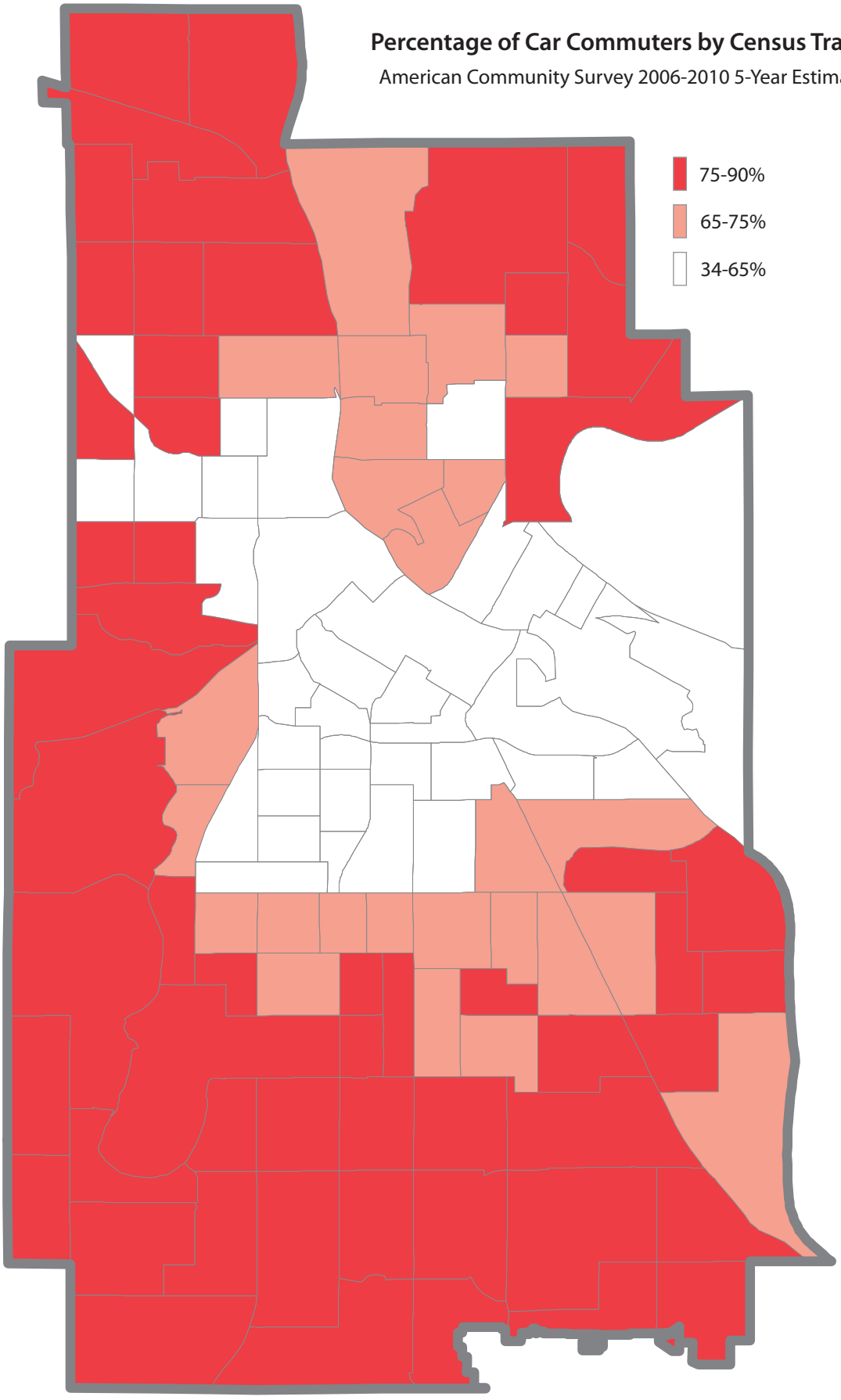
American Community Survey 2006-2010 5-Year Estimate



*Estimated transit commuters in census tract divided by estimated workers living in census tract.

Percentage of Car Commuters by Census Tract*

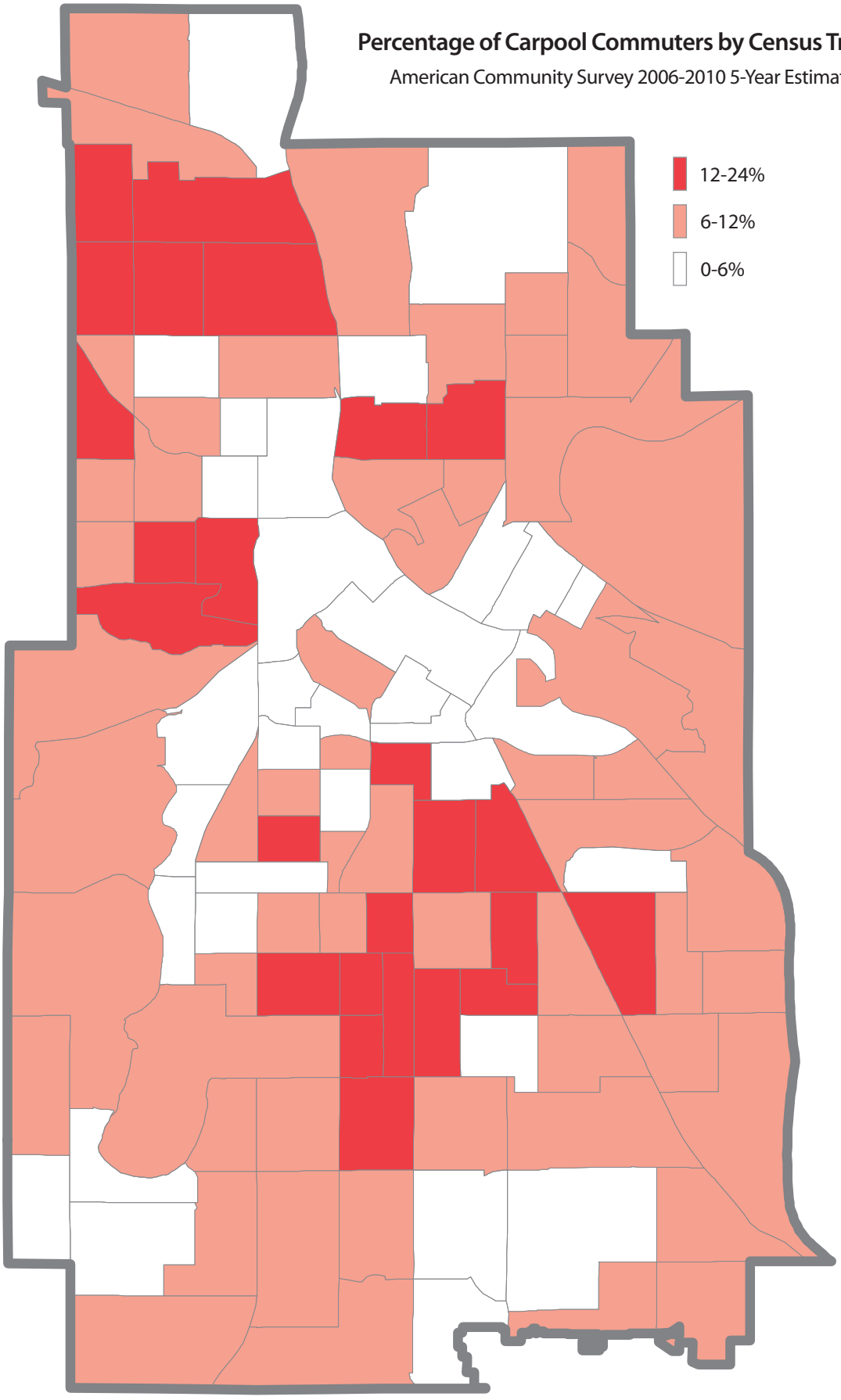
American Community Survey 2006-2010 5-Year Estimate



*Estimated car commuters (includes carpool commuters) in census tract divided by estimated workers living in census tract.

Percentage of Carpool Commuters by Census Tract*

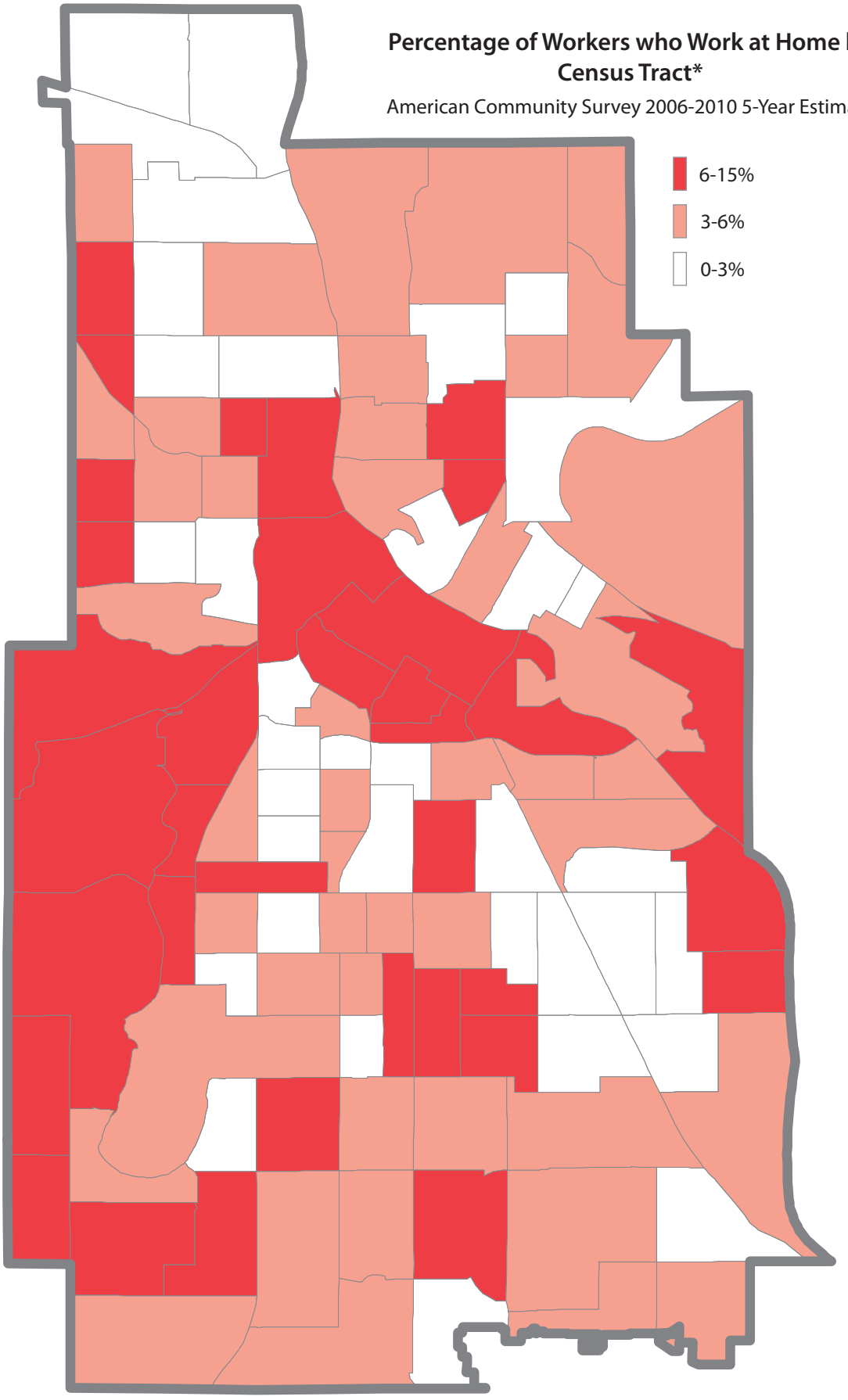
American Community Survey 2006-2010 5-Year Estimate



*Estimated carpool commuters in census tract divided by estimated workers living in census tract.

Percentage of Workers who Work at Home by Census Tract*

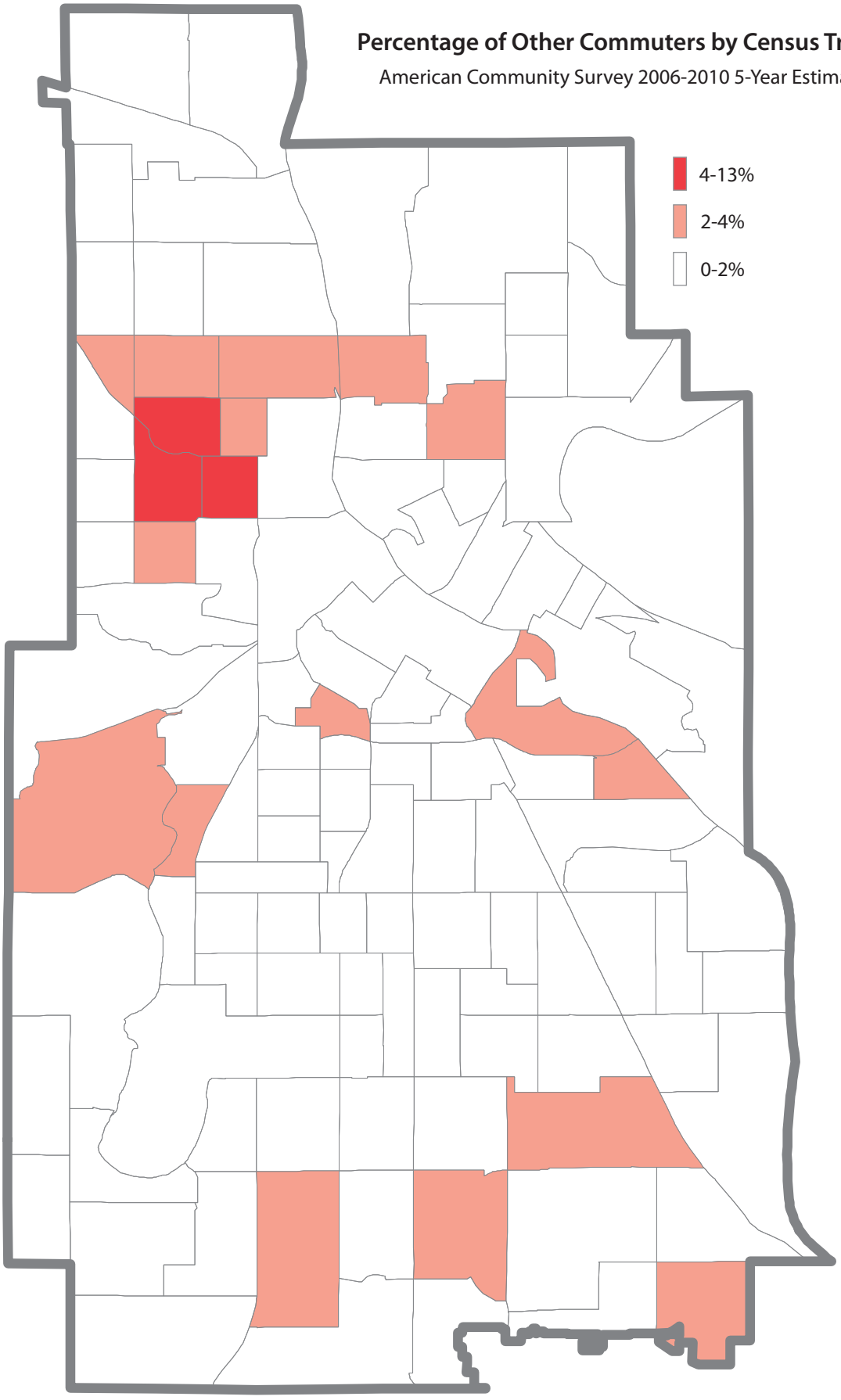
American Community Survey 2006-2010 5-Year Estimate



*Estimated workers who work at home in census tract divided by estimated workers living in census tract.

Percentage of Other Commuters by Census Tract*

American Community Survey 2006-2010 5-Year Estimate



*Estimated "other" commuters in census tract divided by estimated workers living in census tract.